# 1.0 What is TOD?

Transit-Oriented Development (TOD) is defined as "a mixed-use community within an average 2,000-foot walking distance of a transit stop and core commercial area. TODs mix residential, retail, office, open space, and public uses in a walkable environment, making it convenient for residents and employees to travel by transit, bicycle, foot, or car." This concept, popularized in the early 1990s by renowned architect and urban planner Peter Calthorpe, has revolutionized the transportation industry by connecting land use and transportation in an integrated development approach.

The State of Connecticut has recognized the importance of TOD in the planning process as it continues to upgrade its commuter rail network in response to growth in rail ridership and the need to find alternatives to the automobile. In 2007, the State passed a law that defined TOD as "the development of residential, commercial and employment centers within one-half mile or walking distance of public transportation facilities, including rail and bus rapid transit and services, that meet transit supportive standards for land uses, built environment densities and walkable environments, in order to facilitate and encourage the use of those services."

The Danbury Branch study corridor includes eight municipalities, which, from south to north, are Norwalk, Wilton, Redding, Ridgefield, Bethel, Danbury, Brookfield, and New Milford. The majority of employees who reside in this corridor (58%) also work within the corridor, and an additional 29% of workers are employed in other cities and towns within Connecticut. This pattern of intrastate commuting demonstrates a growing market for transit use where TOD could serve as a major attraction in drawing potential riders to the stations. Even a small shift in commuting mode choice (78% of corridor employees currently drive alone to work) could have positive impacts on the environment of the corridor. However, encouraging such a shift through the implementation of TOD would not only benefit the environment, but the economies of the municipalities within the Danbury Branch study corridor would also be positively impacted.



TOD in Strasbourg, France

#### **Elements of TOD for the Danbury Branch Corridor**

The key elements that characterize successful TOD often include higher-density mixed-use development within walking distance – or a half mile – of transit stations; a variety of housing types; quality public spaces; a "rational" amount of parking; and walking and biking facilities that emphasize walkways, paths, and pedestrian connections between key destinations.

The Center for Transit-Oriented Development, an organization focused on best practices, research, and tools that support market-based TOD, uses a performance-based definition that highlights the following outcomes for determining success of a TOD:

- Increase "location efficiency" so people can walk and bike and take transit
- Boost transit ridership and minimize traffic
- Provide a rich mix of housing, shopping and transportation choices
- Generate revenue for the public and private sectors and provide value for new and existing residents
- Create a sense of place

It is important to recognize that TOD elements and scale differ from one corridor to another, from one type of transit to another, and from one station location to another. As is often noted, one TOD size or type does not fit all. In fact, a variety of TOD place types have been defined by transit specialists. These include:

- Regional Center
- City Center
- Suburban Center
- Transit Town Center
- Urban Neighborhood
- Transit Neighborhood
- Mixed Use Corridor

The Danbury Branch corridor can be characterized as a mostly suburban corridor with several key City Centers, at least three Transit Town Centers, and several Suburban Centers. The two key City Centers are within the cities of Norwalk and Danbury, which both have downtown rail stations. A third potential City Center, in New Milford, would result from an extension of the Danbury Branch. The TOD place type designations, as determined by recent observations, is shown in Table 1.1.

Table 1.1: TOD Place Types

Station (Existing or Alternative)	TOD Type
South Norwalk	Regional/City Center
Merritt 7	Transit Town Center
Wilton	Transit Town Center
Cannondale	Transit Town Center
Branchville	Suburban Center
Redding	Suburban Center
Bethel	Transit Town Center
Danbury	Regional/City Center
North Danbury Sites #1 and #2	Suburban Center
Brookfield Site #1	Suburban Center
Brookfield Site #2	Transit Town Center
New Milford Sites #3, #4A&B, #5	City Center/Transit Town Center
New Milford Sites #1 and #2	Suburban Center

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In addition to the types of TOD places, it is important to consider what are the most important and relevant elements of TOD that can be applicable to the existing and future station sites along the Branch. These elements typically include level of transit service and intermodal connections, amount of parking, walkability and overall pedestrian access, density of mixed-use and residential development, level of traffic, and quality of public spaces.

Table 1.2 describes a set of guiding principles that are consistent with best practices for TOD and the concept of livability that can be considered essential to the success of TOD within the Danbury Branch corridor.

## What is a livable community?

"It's a community where if people don't want an automobile, they don't have to have one. A community where you can walk to work, your doctor's appointment, pharmacy or grocery store. Or you could take ... rail, a bus, or ride a bike."

- US Department of Transportation Secretary Ray LaHood, October 2009

Table 1.2: TOD Guiding Principles

### Recommended TOD Guiding Principles for the Danbury Branch Corridor

#### **Quality and Level of Commuter Rail Service**

The current level of rail service along the Branch is one train every 30-45 minutes during AM and PM peak weekday service, with much more infrequent service during the midday, nights, and weekends. Three trains per day on the Branch provide a direct trip to Grand Central Terminal. Improvements to frequency and reliability of service will have an overall positive impact on TOD for the Branch.

#### **Level of Parking**

Each station along the Branch exhibits different parking requirements and characteristics. There is no overall solution to parking; it must be addressed on a station-by-station basis. Too much parking in one location could discourage TOD, while too little would discourage use of commuter rail service. It is critical for stations along the Branch to balance the need for increased commuter rail parking with the attractiveness and quality of the TOD environment.

#### **Quality of Pedestrian Access and Walkability within Each TOD Site**

TOD relies on a safe, convenient network of sidewalks and pathways within a few minutes walk from the station, typically defined as one-quarter and one-half mile radii. Improvements to existing pedestrian and bicycle facilities need to be integrated into any future TOD planning at Branch stations.

### **Control of Traffic Congestion at Each TOD Location**

Careful planning of station access to minimize traffic congestion and not encumber pedestrian flow, especially during peak hours, in conjunction with the planning and development of TOD at each station location, will need to be an important part of the planning process as TOD efforts move forward.

#### **Balance of New Residential and Mixed Use Development**

Successful TOD is based on four components: density that is greater than the community average; a mix of residential, commercial, service employment, and public uses; pedestrian-friendly buildings; and a defined center with multiple attractions.

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